

Claim 54 recites a prosthesis including a plurality of discrete structural wires or filaments joined together to form the prosthesis, the wires or filaments each having one or more corrugated portions and at least some of the wires or filaments having one or more generally straightened extension portions. Hoop-like tubular portions of the prosthesis are formed from the corrugated portions of two or more of the wires or filaments. Also, the extension portions extend between and connect consecutive ones of the hoop-like tubular portions.

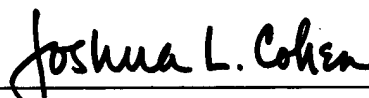
As recited in claim 55, the corrugations can comprise zig-zags having V-shaped apices connected by generally straight intermediate portions. As recited in claim 56, at least some of the extension portions extending between and connecting consecutive ones of the hoop-like tubular portions can be oriented skew relative to the tubular axis. As recited in claim 57, the tubular portions can be arranged generally adjacent to each other. As recited in claim 58, the prosthesis can be a forked prosthesis comprising a generally tubular main branch and at least two secondary branches extending from the main branch. As recited in claim 59, consecutive hoop-like tubular portions can also be connected at a point circumferentially displaced from the extension portion.

Claim 60 recites a prosthesis including a wire or filament having one or more corrugated portions and one or more generally straightened extension portions. Hoop-like tubular portions of the prosthesis are formed from the corrugated portions of two or more of the wires or filaments, and the extension portions extend in a helical path between and connect consecutive hoop-like tubular portions.

Claim 61 recites an endoluminal stent including a plurality of hoops axially displaced in a tubular configuration along a common axis. Each of the hoops comprises a plurality of sinuous or zig-zag segments having apices in a plane substantially perpendicular to the longitudinal axis of the stent. Adjacent hoops are connected by a connecting segment that extends along a helical path from a sinuous or zig-zag segment of one of the adjacent hoops to a sinuous or zig-zag segment of the other one of the adjacent hoops.

Support for claims 54-61 can be found in Applicants' Figs. 1A, 1B, 2A, 2B, 3, and 4A-4F. Support is also found in Applicants' specification at page 23, line 11 through page 27, line 2. Additional support for claims 54-61 can be found elsewhere throughout Applicants' specification and figures.

Respectfully Submitted,



Paul F. Prestia, Reg. No. 23,031  
Joshua L. Cohen, Reg. No. 38,040  
Attorneys for Applicants

Dated: August 31, 1999  
Suite 301  
One Westlakes, Berwyn  
P.O. Box 980  
Valley Forge, PA 19482-0980  
(610) 407-0700

The Assistant Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated with this communication.

**EXPRESS MAIL** Mailing Label Number: EL370858037US

Date of Deposit: August 31, 1999

I hereby certify that this paper and fee are being deposited, under 37 C.F.R. § 1.10 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

  
Kathleen Libby